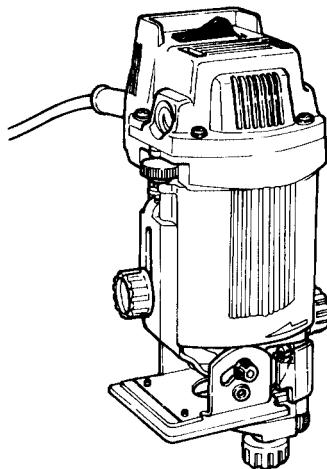


HITACHI

**TRIMMER
KANTENFRÄSE
AFFLEUREUSE
RIFILATORE
KANTENFREESMACHINE
REFILADORA DE FORMICA**

TR-6

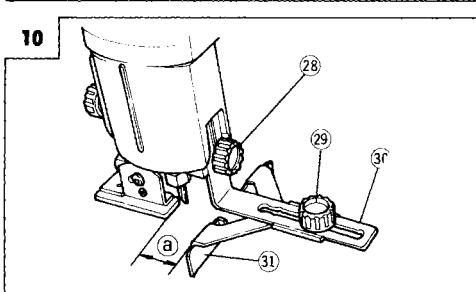
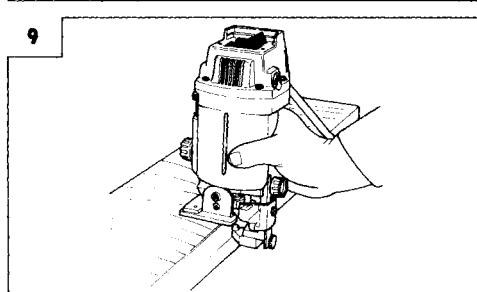
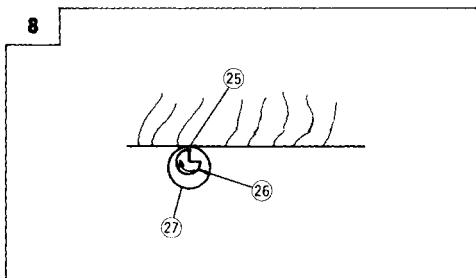
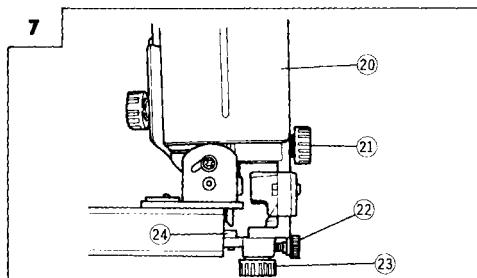
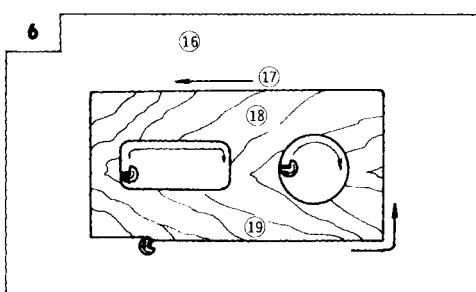
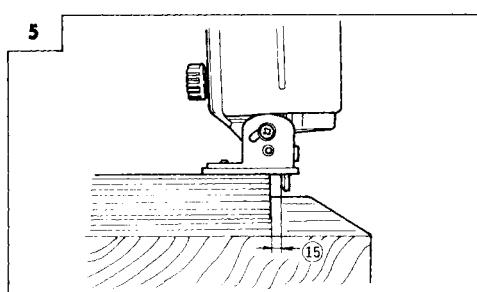
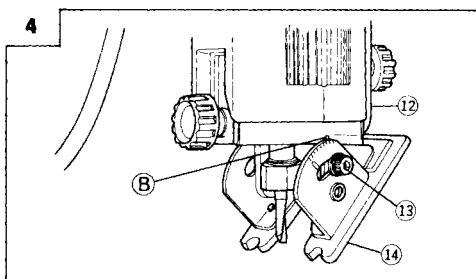
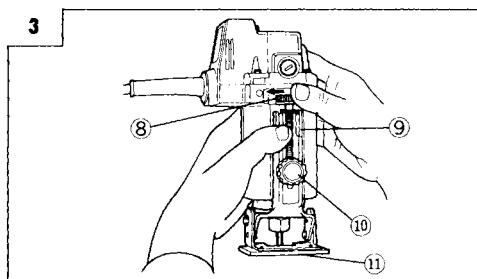
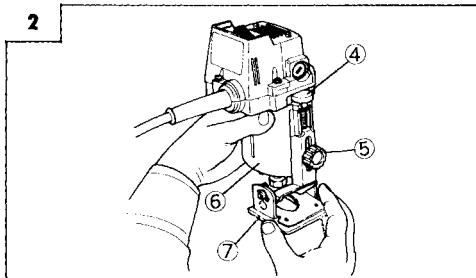
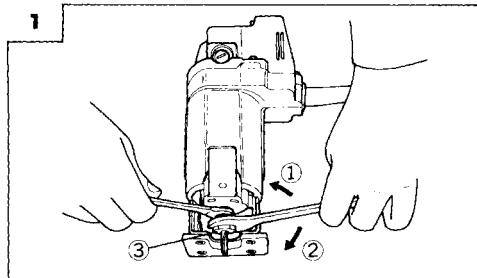


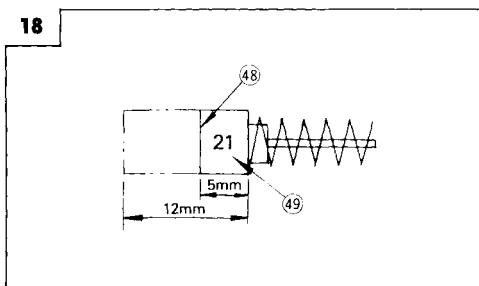
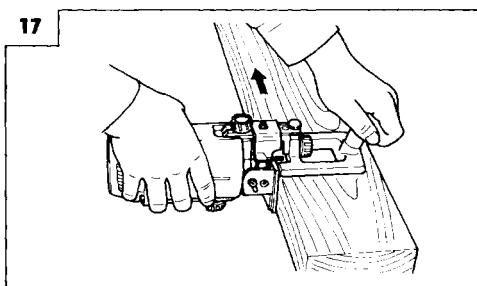
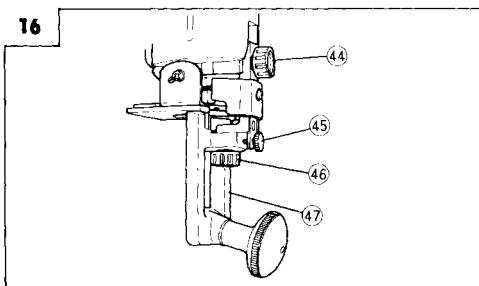
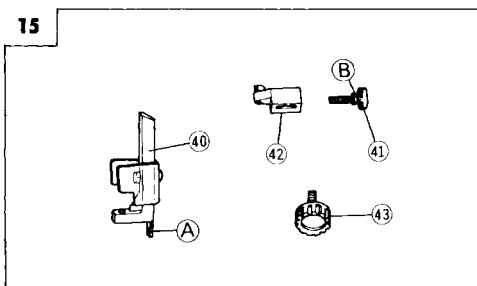
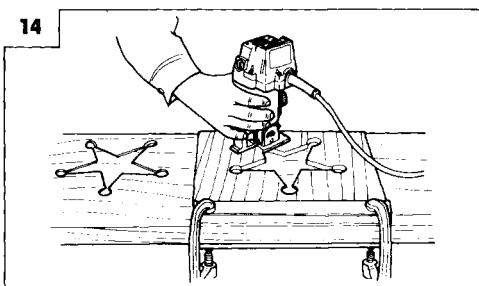
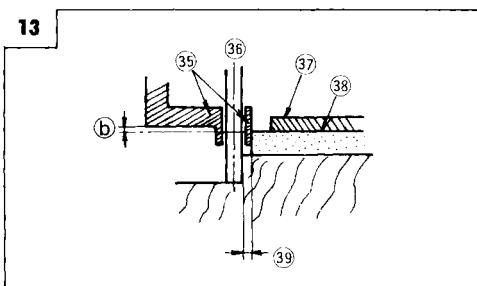
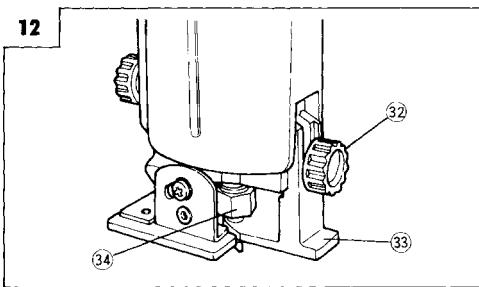
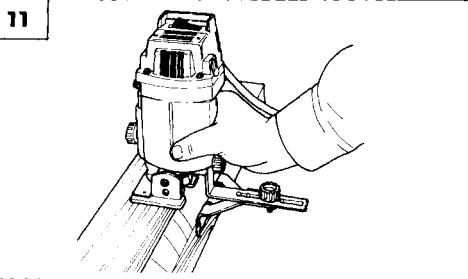
Read through carefully and understand these instructions before use.
Diese Anleitung vor Benutzung des Werkzeugs sorgfältig durchlesen und verstehen.
Lire soigneusement et bien assimiler ces instructions avant usage.
Prima dell'uso leggere attentamente e comprendere queste istruzioni.
Deze gebruiksaanwijzing s.v.p. voor gebruik zorgvuldig doorlezen.
Leer cuidadosamente y comprender estas instrucciones antes del uso.



**Handling instructions
Bedienungsanleitung
Mode d'emploi
Istruzioni per l'uso
Gebruiksaanwijzing
Instrucciones de manejo**

| | English | Deutsch | Français |
|---|--|---|---|
| ① | Loosen | Lockern | Desserrer |
| ② | Tighten | Festziehen | Serrer |
| ③ | Collet chuck | Spannzange | Mandrin de serrage |
| ④ | Stopscrew (A) | Anschlagschraube (A) | Vis d'arrêt (A) |
| ⑤ | Knob bolt (A) | Rändelschraube (A) | Bouton de boulonnage (A) |
| ⑥ | Housing | Gehäuse | Boîtier |
| ⑦ | Base | Zurichtisch | Base |
| ⑧ | Stopscrew (A) | Anschlagschraube (A) | Vis d'arrêt (A) |
| ⑨ | Base (A) part | Teil (A) des Zurichtisches | Pièce (A) de base |
| ⑩ | Knob bolt (A) | Rändelschraube (A) | Bouton de boulonnage (A) |
| ⑪ | Base | Zurichtisch | Base |
| ⑫ | Base holder | Halter des Zurichtisches | Support de base |
| ⑬ | Bolt | Schraube | Boulon |
| ⑭ | Base | Zurichtisch | Base |
| ⑮ | Keep the bit separated from the material | Mit der Fräse nicht das Metall berühren | Tenir le couteau séparé du matériau |
| ⑯ | For cutting the external circumference | Fräsen der Außenkant | Pour coupe de la circonference externe |
| ⑰ | Trimmer feeding direction | Vorschubrichtung der Kantenfräse | Direction de l'avance de la machine |
| ⑱ | For cutting inner circumference | Zurichten von Innenkanten | Pour coupe de la circonference interne |
| ⑲ | Material | Material | Matériau |
| ⑳ | Housing | Gehäuse | Boîtier |
| ㉑ | Knob bolt (B) | Rändelschraube (B) | Bouton de boulonnage (B) |
| ㉒ | Stopscrew (B) | Anschlagschraube (B) | Vis d'arrêt (B) |
| ㉓ | Knob bolt (C) | Rändelschraube (C) | Bouton de boulonnage (C) |
| ㉔ | Guide pin | Führungsstift | Goupille de la pièce de guidage |
| ㉕ | Set the guide pin | Führungsstift einstellen | Réglage de la goupille de guidage |
| ㉖ | Bit | Fräse | Conteau |
| ㉗ | Guide pin | Führungsstift | Goupille de guidage |
| ㉘ | Knob bolt (B) | Rändelschraube (B) | Bouton de boulonnage (B) |
| ㉙ | Knob bolt (D) | Rändelschraube (D) | Bouton de boulonnage (D) |
| ㉚ | Guide holder | Halter für den Anschlag | Support de guidage |
| ㉛ | Straight guide | Parallelanschlag | Pièce de guidage droite |
| ㉜ | Knob bolt (B) | Rändelschraube (B) | Bouton de boulonnage (B) |
| ㉝ | Template guide | Schablonenführung | Guide-gabarit |
| ㉞ | Collet chuck | Spannzange | Mandrin de serrage |
| ㉟ | Template guide | Schablonenführung | Guide-gabarit |
| ㉟ | Bit | Fräse | Couteau |
| ㉜ | Base | Zurichtisch | Base |
| ㉝ | Template | Schablone | Gabarit |
| ㉞ | Shifting is caused over or this distance | Es wird eine Verschiebung um diesen Abstand hervorgerufen | Le déplacement se fait sur cette distance |
| ㉟ | Guide holder | Führungshalter | Support de guidage |
| ㉟ | Stopscrew (B) | Anschlagschraube (B) | Vis d'arrêt (B) |
| ㉟ | Trimmer guide | Zurichtführung | Pièce de guidage machine |
| ㉟ | Knob bolt (C) | Rändelschraube (C) | Bouton de boulonnage (C) |
| ㉟ | Knob bolt (B) | Rändelschraube (B) | Bouton de boulonnage (B) |
| ㉟ | Stopscrew (B) | Anschlagschraube (B) | Vis d'arrêt (B) |
| ㉟ | Knob bolt (C) | Rändelschraube (C) | Bouton de boulonnage (C) |
| ㉟ | Trimmer shoe base | Zurichtschuhplatte | Base sabot |
| ㉟ | Wear limit | Verschleißgrenze | Limite d'usure |
| ㉟ | No. of carbon brush | Nr. der Kohlebürste | N° du balai carbone |





| | Italiano | Nederlands | Español |
|---|--|---|--|
| ① | Allentare | Losdraaien | Aflojar |
| ② | Serrare | Vastdraaien | Apretar |
| ③ | Mandrino | Spanklem | Pinza |
| ④ | Vite d'arresto (A) | Aanslagschroef (A) | Tornillo-stop (A) |
| ⑤ | Bullone a manopola (A) | Gekartelde schroef (A) | Perno de cabeza (A) |
| ⑥ | Involucro | Kast | Carcasa |
| ⑦ | Basamento | Grondplaat | Base |
| ⑧ | Vite d'arresto (A) | Aanslagschroef (A) | Tornillo-stop (A) |
| ⑨ | Parte (A) del basamento | Deel (A) van de grondplaat | Base (A) parte |
| ⑩ | Bullone a manopola | Gekartelde schroef (A) | Perno de cabeza (A) |
| ⑪ | Basamento | Grondplaat | Base |
| ⑫ | Porta-basamento | Houder van de grondplaat | Dispositivo sujetador de la base |
| ⑬ | Bullone | Schroef | Perno |
| ⑭ | Basamento | Grondplaat | Base |
| ⑮ | Tenere la punta scostata dal materiale | Met de frees het metaal niet aanraken | Mantener la broca separada del material |
| ⑯ | Per tagliare la circonferenza esterna | Het frezen van de buitenkant | Para cortar la circunferencia externa |
| ⑰ | Senso di avanzamento della rifinitrice | Richting waarin de machine naar voren geschoven wordt | Dirección de alimentación de la cortadora de cerco |
| ⑱ | Per tagliare una circonferenza interna | Het effenen van binnenkanten | Para cortar la circunferencia interna |
| ⑲ | Materiale | Materiaal | Material |
| ⑳ | Involucro | Kast | Carcasa |
| ㉑ | Bullone a manopola (B) | Gekartelde schroef (B) | Perno de cabeza (B) |
| ㉒ | Vite d'arresto (B) | Aanslagschroef (B) | Tornillo-stop (B) |
| ㉓ | Bullone a manopola (C) | Gekartelde schroef (C) | Perno de cabeza (C) |
| ㉔ | Punta di guida | Leistift | Pasador de guía |
| ㉕ | Regolare la punta di guida | Leistift instellen | Graduar el pasador de guía |
| ㉖ | Punta | Frees | Broca |
| ㉗ | Punta di guida | Leistift | Pasador de guía |
| ㉘ | Bullone a manopola (B) | Gekartelde schroef (B) | Perno de cabeza (B) |
| ㉙ | Bullone a manopola (D) | Gekartelde schroef (D) | Perno de cabeza (D) |
| ㉚ | Porta-guida | Houder voor de geleider | Sujetador de guía |
| ㉛ | Guida diritta | Parallelgeleider | Guía derecha |
| ㉜ | Bullone a Manopola (B) | Gekartelde schroef (B) | Perno de cabeza (B) |
| ㉝ | Guida per sagoma | Schablonengeleider | Guía de patrón |
| ㉞ | Mandrino | Spanklem | Pinza |
| ㉟ | Guida per sagoma | Schablonengeleider | Guía de patrón |
| ㉟ | Punta | Frees | Broca |
| ㉜ | Base | Grondplaat | Base |
| ㉜ | Sagoma | Schabloon | Patrón |
| ㉜ | Lo scarto è causato in più o in meno, di questa distanza | Er wordt een verschuiving om deze afstand opgewekt | Alteración está causada por encima de esta distancia |
| ㉜ | Porta-guida | Leihouder | Dispositivo sujetador de la guía |
| ㉜ | Vite d'arresto (B) | Aanslagschroef (B) | Tornillo-stop (B) |
| ㉜ | Guida della rifinitrice | Geleider voor de vlakfrees | Guía recortadora |
| ㉜ | Bullone a manopola (C) | Gekartelde schroef (C) | Perno de cabeza (C) |
| ㉜ | Bullone a manopola (B) | Gekartelde schroef (B) | Perno de cabeza (B) |
| ㉜ | Vite d'arresto (B) | Aanslagschroef (B) | Tornillo-stop (B) |
| ㉜ | Bullone a manopola (C) | Gekartelde schroef (C) | Perno de cabeza (C) |
| ㉜ | Basamento a ceppo per rifinitrice | Vlakschuurzool | Base de pie de la recortadora |
| ㉜ | Limite di usura | Slijtagegrens | Límite de uso |
| ㉜ | N. della spazzola di carbone | Nr. van de koolborstel | Nº de carbón de contacto |

GENERAL OPERATIONAL PRECAUTIONS

1. Keep work area clean. Cluttered areas and benches invite injuries.
2. Consider work area environment. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Don't use tool in presence of flammable liquids or gases.
3. Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzine, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.
4. Guard against electric shock. Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
5. Keep children away. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
6. Store idle tools. When not in use, tools should be stored in dry and high or locked-up place out of reach of children.
7. Don't force tool. It will do the job better and safer at the rate for which it was intended.
8. Use right tool. Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended – for example – don't use circular saw for cutting tree limbs or logs.
9. Dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
10. Use safety glasses. Also use face or dust mask if cutting operation is dusty.
11. Don't abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
12. Secure work. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
13. Don't overreach. Keep proper footing and balance at all times.
14. Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
15. Disconnect tools. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

16. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
17. Avoid unintentional starting. Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
18. Outdoor use extension cords. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
19. Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
20. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
21. Do not use power tools for applications other than those specified in the Handling Instructions.
22. The use of any other accessory or attachment other than recommended in this handling instructions or the HITACHI catalog may present a risk of personal injury.
23. Repairing must be done only by authorized service facility. Manufacturer is not responsible for any damages and injuries due to the repair by the unauthorized persons as well as the mishandling of the tool.
24. To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
25. Do not touch movable parts or accessories unless the power source has been disconnected.
26. Use your tool at lower input than specified on the nameplate; otherwise, the finish may be spoiled and working efficiency reduced due to motor overload.
27. Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzine, carbon tetrachloride, alcohol, ammonia and oil containing chloric annex may damage and crack plastic parts. Do not wipe them with such solvent. Wipe plastic parts with a soft cloth lightly dampened with soapy water.
28. Use only original HITACHI replacement parts.
29. This tool should only be disassembled for replacement of carbon brushes.
30. The exploded assembly drawing on this handling instructions should be used only for authorized service facility.

SPECIFICATIONS

| | |
|------------------------|--|
| Voltage (by areas)* | (110V, 115V, 120V, 127V, 220V, 230V, 240V) ~ |
| Input | 440 W* |
| No-Load Speed | 30000/min |
| Collect Chuck Capacity | 6mm or 6.35mm (1/4") |
| Weight (without cord) | 1.6kg |

*Be sure to check the nameplate on product as it is subject to change by areas.

STANDARD ACCESSORIES

(1) Trimmer Guide 1
 (2) Straight Guide 1
 (3) Wrench 2
 (4) Hexagonal Bar Wrench 1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES — sold separately

(1) Template Guide
 (2) Trimmer Shoe Base

Optional accessories are subject to change without notice.

APPLICATIONS

Trimming plywood, and woodworking such as beveling, rabbeting, etc.

PRIOR TO OPERATION

1. Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.
2. Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, the power tool will start operating immediately, inviting serious accident.
3. Extension cord. When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

MOUNTING AND REMOVING THE BIT**CAUTION**

To prevent possible accident, ensure that the power switch is turned off, and the plug is removed from the power source.

1. Fitting the bit:
 - (1) Remove the trimmer guide from the main body.
 - (2) Insert the bit deeply (15mm or more from the side of the collet chuck) into the collet chuck, and securely tighten the collet chuck with the accessory wrench, as shown in Fig. 1.

CAUTION

Ensure that the collet chuck is securely tightened after inserting the bit. The collet chuck could be damaged if it is tightened with no bit mounted.

2. Removal of the bit:

Loosen the collet chuck as illustrated in Fig. 1, and remove the bit.

HOW TO USE THE ELECTRIC TRIMMER**1. Adjustment of cutting depth**

The adjustment of cutting depth of this tool can be adjusted in two ways, large adjustments and fine adjustments.

- (1) For large adjustment of the base (Fig. 2)

① Loosen knob bolt (A) sufficiently.

② Slide the base to the required depth. Try to adjust the base so that the tip of the router bit and the lower surface of the base are at the required depth.

NOTE: The stopscrew (A) is designed smaller than the threaded hole in the base, so that you may be able to make larger adjustments more efficiently by not having to thread the base and the screw, just slide the base.

③ Tighten knob bolt (A) firmly.

- (2) For fine adjustments of the base (Fig. 3)

① Loosen knob bolt (A) slightly.

② With the knob bolt (A) loosened slightly rotate the stopscrew (A) in the required direction to raise or lower the base.

NOTE: The pressure from the knob bolt (A) will keep the threads aligned so that minute adjustments can be made. (1mm movement per rotation of the stopscrew (A))

③ Tighten knob bolt (A) firmly.

2. Adjustment of cutting angle: (See Fig. 4)

Cutting angle can be adjusted by loosening the bolts (both sides) with the accessory hexagonal bar wrench, and moving the base to the desired position. The scale engraved on the base may be used as an approximate angular standard. Adjustment can be easily accomplished by aligning the base holder (B) projection with the desired scale setting. Securely tighten the bolts with the hexagonal bar wrench after performing adjustment.

3. Cutting:

Use of an appropriate guide is highly recommended to ensure efficient cutting operation. For details, refer to the section entitled "How to use the Guides".

- (1) As shown in Fig. 5, keep the bit separated from the workpiece before the power switch is turned ON.

- (2) The bit rotates clockwise as seen from above (in the direction indicated by the arrow on the housing). Feed the trimmer in the directions indicated by the arrows in Fig. 6.

HOW TO USE THE GUIDES**1. Trimmer guide:**

The trimmer guide is handy when performing such work as trimming and beveling of plywood. Mount the trimmer guide to the housing with knob bolt (B). Adjust the guide pin by loosening knob

bolt (C) and rotating stopscrew (B), shown in Fig. 7, setting the guide pin to the desired position, as shown in Fig. 8. Operation is as shown in Fig. 9.

2. Straight Guide:

The straight guide is handy when performing linear processing work such as beveling, grooving, etc. Mount the straight guide to the housing with knob bolt (B). Adjust the distance \textcircled{A} from the bit to the surface of the straight guide by loosening the knob bolt (D), and moving the straight guide as desired, as shown in Fig. 10. Operation is as shown in Fig. 11.

HOW TO USE THE OPTIONAL ACCESSORIES

1. Template guide:

The template guide is handy when processing a number of materials in the same shape through use of a template. Mount the template guide to the housing with knob bolt (B), and secure it as shown in Fig. 12. Use the straight bit. Length \textcircled{B} , shown in Fig. 13, from the base to the template guide is set at zero.

Operation is as shown in Fig. 14.

2. Trimmer shoe base:

The trimmer shoe base is handy for beveling, rabbeting, etc.

Trimmer shoe base assembly:

° Remove the trimmer guide (standard accessory) from the trimmer guide assembly, as shown in Fig. 15. Drive stopscrew (B) into the trimmer shoe base, and attach the shoe base to the guide holder with knob bolt (C). (Insert the \textcircled{B} part of stopscrew (B) into the groove \textcircled{A} of the guide holder.) Adjust the cutting depth by loosening knob bolt (C), shown in Fig. 16, and rotating stopscrew (B).

Feed the unit in the direction indicated by the arrow in Fig. 17. (The arrow mark shown on the trimmer shoe base)

MAINTENANCE AND INSPECTION

1. Inspecting the bit:

Continued use of a dull or damaged bit will result in reduced cutting efficiency and may cause overloading of the motor. Replace the bit with a new one as soon as excessive abrasion is noted.

2. Inspecting the mounting screws:

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Inspecting the carbon brushes: (Fig. 18)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush could result in motor trouble, replace a carbon brush with a new one when it becomes

worn to or near the 'wear limit'. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

4. Replacing a carbon brush:

Disassemble the brush cap with a minus-head screwdriver. The carbon brush can then be easily removed.

5. Maintenance of the motor:

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

NOTE

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

This appliance is produced to conform to the requirements of B. S. 800:1977.*

* This requirement is applicable to appliances for UNITED KINGDOM.

IMPORTANT

Correct connection of the plug

The wires of the mains lead are coloured in accordance with the following code:

Blue -Neutral

Brown -Live

As the colours of the wires in the mains lead of this tool may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.

The wire coloured brown must be connected to the terminal marked with the letter L or coloured red.

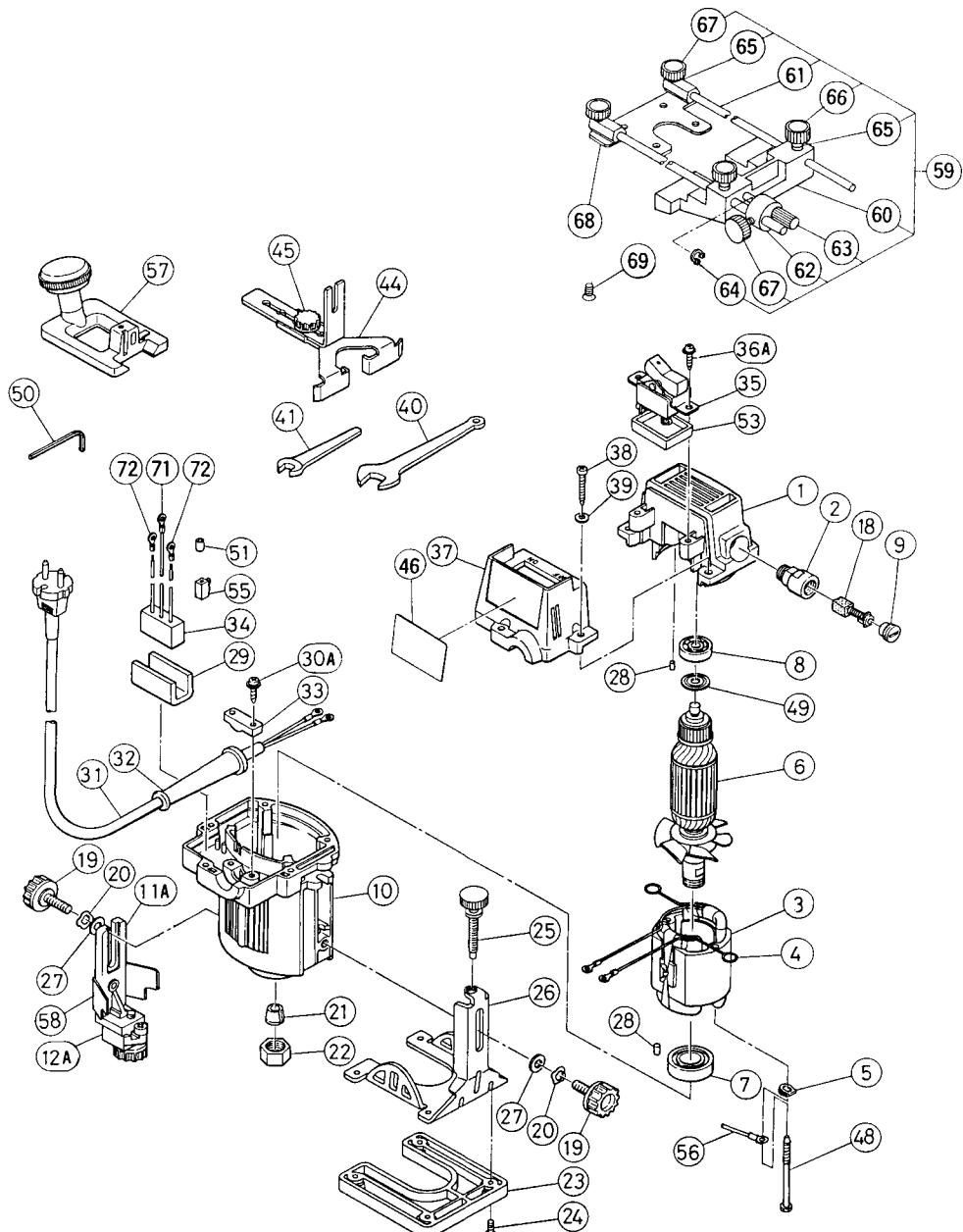
Neither core must be connected to the earth terminal.

NOTE

This requirement is provided according to BRITISH STANDARD 2769: 1984.

Therefore, the letter code and colour code may not be applicable to other markets except United Kingdom.

The noise emitted by this power tool is measured in accordance with IEC 59 (CO) 11, IEC 704, DIN 45 635 Part 21, NFS 31-031 (84/537/EEC for concrete breakers). The sound pressure level at the workplace can exceed 85 dB (A); in this case noise protection for the operator is required.



| Item No. | Part Name | |
|----------|------------------------------|---------|
| 1 | Rear Cover Ass'y | |
| 2 | Brush Holder | |
| 3 | Stator Ass'y | |
| 4 | Brush Terminal | |
| 5 | Earth Washer | D4 |
| 6 | Armature Ass'y | |
| 7 | Ball Bearing (6002VVCMPS2S) | |
| 8 | Ball Bearing (627VVMC2EPS2S) | |
| 9 | Brush Cap | |
| 10 | Housing | |
| 11A | Trimmer Guide Ass'y | |
| 12A | Guide Pin | |
| 18 | Carbon Brush | |
| 19 | Knob Bolt | M6 × 17 |
| 20 | Wave Washer | |
| 21 | Collet Cone | |
| 22 | Collet Nut | |
| 23 | Sub Base | |
| 24 | Flat Hd. Screw | M4 × 8 |
| 25 | Screw (A) | |
| 26 | Base | |
| 27 | Washer | M6 |
| 28 | Bearing Lock | |
| 29 | Support (B) | |
| 30A | Tapping Screw (W/Flange) | D4 × 16 |
| 31 | Cord | |
| 32 | Cord Armor | |
| 33 | Cord Clip | |
| 34 | Noise Suppressor | |
| 35 | Switch | |
| 36A | Tapping Screw (W/Washer) | D4 × 12 |
| 37 | Switch Cover | |
| 38 | Tapping Screw | D4 × 25 |
| 39 | Washer | M4 |
| 40 | Wrench | 17MM |
| 41 | Wrench | 10MM |
| 44 | Straight Guide Ass'y | |
| 45 | Knob Bolt | M6 × 17 |

| Item No. | Part Name | |
|----------|--------------------------------------|---------|
| 46 | Name Plate | |
| 48 | Hex. Hd. Tapping Screw | D4 × 60 |
| 49 | Tail Washer | |
| 50 | Hexagon Bar Wrench | 4MM |
| 51 | Tube (D) | |
| 53 | Rubber Packing | |
| 55 | Pillar Terminal | |
| 56 | Internal Wire Ass'y | |
| 57 | Trimmer Shoe | |
| 58 | Eye Shield | |
| 59 | Guide (B) Ass'y | |
| 60 | Straight Guide (B) | |
| 61 | Guide Bar | |
| 62 | Screw Holder | |
| 63 | Feed Screw (A) | |
| 64 | Retaining Ring (E-Type) For D5 shaft | |
| 65 | Spring | |
| 66 | Stopper Screw | M5 × 14 |
| 67 | Stopper Screw | M5 × 8 |
| 68 | Guide (A) | |
| 69 | Flat Hd. Screw | M4 × 10 |
| 71 | Terminal (50051) | |
| 72 | Terminal | |

Parts are subject to possible modification without notice due to improvements.